

ABSTRACT

An ellipsometric apparatus provides two impinging focused probe beams directed to reflect off the sample along two mutually distinct and preferably substantially

5 perpendicular directions. A rotating stage rotates sections of the wafer into the travel area defined by two linear axes of two perpendicularly oriented linear stages. As a result, an entire wafer is accessed for measurement with the linear stages having a travel range of only half the wafer diameter. The reduced linear travel results in a small travel envelope occupied by the wafer and consequently in a small footprint of the apparatus.

10 The use of two perpendicularly directed probe beams permits measurement of periodic structures along a preferred direction while permitting the use of a reduced motion stage.